



## Alteration of Terrain Permitting

### Land Resource Management Workshop

March 2009

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[des.nh.gov/organization/divisions/water/aot](http://des.nh.gov/organization/divisions/water/aot)

## What does an AoT permit cover?

### SHORT TERM

- Sediment and erosion control

### LONG TERM

- Treatment of stormwater
- Prevention of stream bank erosion
- Flood protection
- Groundwater recharge



## Permit Jurisdiction

Terrain Alteration Law: RSA 485-A:17  
Administrative Rules: Env-Wq 1500 (Jan. 1, 2009)

### Permit needed:

- 100,000 sf (2.3 ac) of earth disturbance
- 50,000 sf of earth disturbance if any of the disturbance is in the protected shoreland
- 0+ sf of earth disturbance if any of the disturbance is on a 25%+ slope AND within 50' of a surface water



## Other Regulations

### Local regulations

- ✓ Planning Board approval
- ✓ Excavation projects – RSA 155:E

### Federal regulations

- ✓ EPA's – Construction General Permit (CGP) → Storm Water Pollution Prevention Plan (SWPPP)

### Other state permits

- ✓ Mining projects – RSA 12E
- ✓ Wetlands permits
- ✓ Subdivision permits
- ✓ Subsurface
- ✓ Groundwater withdrawals

## New Regulations - Outline of Changes

1. General Permit by Rule created
2. New application requirements
3. Permit and amendment changes
4. Stormwater controls updated
5. Stormwater treatment systems updated
6. Groundwater recharge requirements added

Antidegradation rules to be added soon - (work group in progress)

## 1. General Permit by Rule Created

### General Permit By Rule

- Linear utility projects
- Asphalt maintenance projects
- Trail projects
- Projects < 100,000 sf or <50,000 sf in Shoreland



### Exemptions:

- NHDOT (covered under a MOA)
- Agricultural projects (RSA 21:34-a) with
  - No significant terrain alteration
  - < 10,000 sq. ft. impervious cover

## 2. New Application Requirements

- Submit a copy of the application to the town and to the local advisory committees, if applicable
- Identification of the resources to be affected:
  - Receiving waters
  - 100-year floodplain location
  - Designated rivers
  - State & federally listed threatened and endangered species
  - Natural heritage bureau check
  - Impaired surface waters

## 3. Permit and Amendment Changes

- Permits now good for 5 years (was 2 years)
- Old active permits can request one last extension, good for up to 5 yrs.
- To request an amendment (time extension, change of ownership, or plan change) download Amendment Request Form at:  
[des.nh.gov/organization/divisions/water/aot/categories/forms.htm](https://des.nh.gov/organization/divisions/water/aot/categories/forms.htm)
- Amendment requests **MUST** be submitted to the department at least **30 days prior** to the permit expiration date!
- An inspection of the site by a PE or CPESC must accompany the amendment request.

## 4. Stormwater Controls Updated

- Detailed soil mapping required to better analyze the soils on site (SSSS/HISS)
- Tighter controls for channel protection for the 2-year storm
- Adding the 50-yr storm to the peak runoff controls to better handle flood events



## 5. Stormwater Treatment Systems Updated

### THE BIG SIX

- Stormwater ponds
- Stormwater wetlands
- Infiltration practices
- Filtering practices
- Flow through swales
- Vegetated Buffers

Sizing for Water Quality Volume (WQV)

WQV = volume of the first 1" of rainfall

90% of storms are less than the WQV

WQV an instantaneous volume; not based on time.

WQV ≠ the 1" 24-hour storm!

Check it out! → [www.unh.edu/erg/cstev/](http://www.unh.edu/erg/cstev/)

## 6. Groundwater Recharge Added



- Mimic natural hydrology
- Not for high load sites



Digital Animation, Inc.

## EXTRA INFO

## OneStop

Alteration of Terrain (Site Specific) Query Parameters

[Questions/Comments: Alteration of Terrain](#)   [Query Instructions](#)

Currently Reviewing Applications Received Before: 12/31/2007  
Backlog Estimate: 44

Town:

Project:

Owner:

Tax Map:


Lot Number:

Permit Number:

File Number:

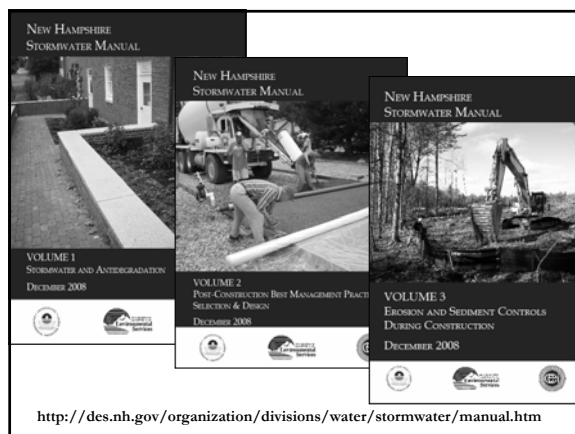
River Name:

**Suggestion:**  
Select Town  
only!



[www.des.nh.gov/onestop](http://www.des.nh.gov/onestop) → Select "OneStop data retrieval site"  
→ click on program of choice

OneStop Information Provided	
File Number: 20071218-01	Status: PERMIT ISSUED
Town: HILL Tax Map: E6 Lot Number: 8 Project Name: PROPOSED GRAVEL PIT - BOOT JACK RD Owner: BOOT JACK ROAD, LLC - SKIP OVERLOCK Agent: ECKMAN ENGINEERING, LLC - JOSEPH GRIFFIN Area Disturbed (sq): 1,198.850 Designated River(if applicable):	Reviewer: GSA Date Application Deemed Complete: 12/18/2007 Date of Request for More Information: 01/24/2008 Received Date to DES Request: 1/30/2008 <b>Permit Number:</b> WPS-8035 Permit Original Issuance: 02/05/2008 Permit Amended on: Permit Expires on:



Order Forms Available	
Volume 1: Stormwater and Antidegradation	\$ 33.00
Volume 2: Post-Construction Best Management Practices Selection & Design	\$ 55.00
Volume 3: Erosion and Sediment Controls During Construction	\$ 49.00
Complete Set – all three volumes	\$120.00

Q & A